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Environmental Cleanup Office

June 30, 2009

Ms. Kristine Koch Remedial Project Manager U.S. EPA Region 10 Office of Environmental Cleanup Mail Stop ECL-115 1200 Sixth Avenue Seattle, WA 98101-3140

Subject: Cascade General, Inc.

Response to January 18, 2008 Information Request Letter under

CERCLA 104(e) - Portland Harbor Superfund Site

Dear Ms. Koch:

This letter and enclosures respond to your information request letter to Mr. Frank Foti, dated January 18, 2008. We appreciate the extension to June 30 for Cascade General, Inc. (Cascade) to respond to your letter.

I am responding under separate cover to an identical information request to Mr. Frank Foti, dated January 18, 2008, for Shipyard Commerce Center LLC (SCC). There is no separate cover letter with that response, however, the information in this cover letter applies to the same property as addressed in that response. SCC is the current property owner. Cascade leases the property and operates a shipyard on the property.

The property has been developed and used for industrial activities for nearly 90 years, starting with its development in 1922 by the Port of Portland, its use by the U.S. Government as a shipyard during and after World War II, and its redevelopment and use as a shipyard by the Port and its numerous lessees from 1950 until 2000.

Cascade initially operated as a Port contractor in 1987 and became the sole operator of the current shipyard in 1995, prior to the property acquisition from the Port in 2000. Cascade has therefore been on the property for a relatively short time in the property's nearly 90-year industrial history (see attached Figure 1).

## Purpose

The purpose of this transmittal cover letter and the substantial length of the enclosures are due mainly to four factors:

1. It is important that EPA have accurate information and understanding of the current property and ownership in relation to the historical property area and ownerships. The current Portland Shipyard operated by Cascade is smaller than the historical area operated by many entities and commonly referred to as the "Portland Shipyard."



- 2. We would like EPA to understand the nature of the purchase agreement and relationship between Cascade and the Port of Portland and our respective 104(e) responses.
- 3. Cascade's affiliate, SCC, made all appropriate inquiry prior to the 2000 property acquisition and have studied and are continuing to study the property in detail to assure the effectiveness of source control.
- 4. As a result of these studies and of improvements initiated by the Port and continued by Cascade and SCC, industrial practices, water quality and waste management are distinctly different than in the past. For example, dry docks have control systems and do not discharge into the river. Process and ballast water are pretreated and conveyed to the City wastewater treatment plant rather than historical outfalls. These changes have curtailed or eliminated discharge of contaminants into the river over the past decade and longer.

### "The Property" and Agreement with the Port

We request EPA to be precise in its use of the terms "Portland Shipyard" and the "Property," as Cascade has not operated on much of the area where historical activities on Swan Island have occurred.

Swan Island, the location of the shipyard, has been redeveloped several times with various names, including the Swan Island Shipyard, Portland Ship Repair Yard, Swan Island Industrial Park, and Portland Shipyard, and Cascade General Shipyard. The acreage of these upland areas is over 400 acres, much larger than the current Portland Shipyard. The aquatic lands used surrounding Swan Island, including the lagoon, total more than 150 acres, likewise larger than the area used by Cascade for its operations. See attached Figure 2.

The current Portland Shipyard (PSY) consists of approximately 64.4 acres of upland and 60.8 acres of submerged land owned in fee, and 12.6 acres of submerged land leased from the state of Oregon.

As noted, Cascade initially operated in some areas as a Port contractor and then became the sole operator of the Port facility. Cascade currently operates on property acquired from the Port by SCC. For purposes of this response, therefore, the "Property" refers to the land owned or leased by Respondent: (a) from 1995-2000, which consists of approximately 94.05 acres of upland and 84 acres of submerged land; and (c) from 2000-present, which consists of approximately 64.4 acres of upland and 73.4 acres of submerged land. These are shown in the attached close-up of this portion of the historical shipyard on Figure 3.

Under prior ownership, Cascade was a contractor/lessee of the Port from 1986-1995 and apparently began working on the Property in 1987. Cascade does not have specific real estate records or information from that time period regarding the portions of the Property it used. To the extent such information exists, please refer to the Port's 104(e) response for that information.

As part of the purchase of the PSY, the Port, Cascade, and Portland Shipyard LLC (now SCC) identified known environmental conditions on the Property and allocated the responsibility for cleanup among them, based on contamination that occurred before the date of baseline conditions

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(pre-existing contamination) and contamination that might occur after that date (subsequent contamination), which was 1998. The comprehensive baseline data have been provided to EPA and the Oregon Department of Environmental Quality (ODEQ) (Portland Shipyard Sediment Investigation Data Report prepared by Striplin Environmental Associates, Inc., November 9, 1998). The Cascade-Port purchase agreement is enclosed with this response.

In simple terms, the Port agreed to conduct any cleanup required by law of pre-existing contamination, and Cascade agreed to conduct any cleanup of subsequent contamination.

In addition, in accordance with this agreement, the Port initiated an upland investigation of soil and ground water conditions in 2001 under an interagency agreement with ODEQ and has participated in the Harbor-wide investigation as a member of the Lower Willamette Group. In 2006, the Property initiated an upland source control investigation focused on stormwater under a voluntary agreement with ODEQ.

For purposes of this 104(e) information request, therefore, Cascade is in a position to respond from its knowledge about operations and activities that have occurred since 1995, when the current ownership acquired the company.

Because the Port operated and leased the Portland Shipyard in the period from 1987-1995, when Cascade was only one of numerous tenants, the Port will have information about the facility in that time period. For the period prior to 1986, Cascade has limited information (principally about physical facilities and not prior operators). Therefore, this response refers EPA to the Port's 104(e) response prior to the time of Cascade's operations at the Property.

#### Other Users and Dischargers on or near the Property

Similarly, as EPA is aware, there have been and continue to be many other industrial and municipal facilities and operations located close to, and in some cases, on the Property, the historical shipyard area, and Swan Island.

For example, the U.S. Government is a long-time owner and operator of industrial maritime facilities on Swan Island and across the Lagoon from the Property. The City of Portland has major outfalls located on the Lagoon, include a major outfall immediately adjacent to the U.S. Government and Cascade facilities, as well a smaller outfall on the Property. The discharges from some of these outfalls drain large areas of mixed use and industrial properties. Many industries operate on Swan Island Industrial Park, are located upstream of Swan Island, or are located on and have outfalls or other discharges directly into the Lagoon. See attached Figure 2.

Several questions in the 104(e) information request refer to facilities or discharges on the Property that cannot be fully answered by Cascade because they relate to current or historic facilities or activities of these other entities. We respectfully refer EPA to these other entities' responses, assuming they received 104(e) information requests. Where facilities or activities of other entities are currently, physically present on the Property, such as current or former municipal outfalls, the enclosed response refers to that entity's 104(e) response for the additional information (e.g., Port and City).

### Synopsis of Portland Shipyard Prior to Cascade

The Property has been operated almost continuously as a ship construction and ship repair facility for over 65 years, after initially being developed and operated as a municipal airport. A substantial area on Swan Island including the Property was developed as a shipyard and supporting facilities in 1942 when Kaiser Company, Inc. was commissioned by the U.S. government to build ships for the allied effort during World War II. Following the war, the Port converted the facility at the western end of Swan Island, including the Property, from a new construction to a repair and maintenance shipyard. The Port controlled, operated, and marketed the shipyard and its infrastructure. A number of private contractors rented facilities and services from the Port, and conducted the actual ship repair and maintenance operations. See attached Figure 1.

The Port expanded and improved the Property over the years, and in 1979, expanded the facilities to include dry dock no. 4, and berths 312, 313, 314, and 315. Currently, the PSY occupies approximately 64 acres on the western end of Swan Island and consists of marine vessel docking, repair, and support facilities.

#### **Cascade Operations**

As noted at the outset of this letter, Cascade began operations at the PSY as one of a number of contractors in 1987. In December 1995, Cascade became the sole repair contractor, and took over operation and maintenance of the PSY from the Port under a lease arrangement. In August 2000, Cascade's affiliated company, Portland Shipyard LLC purchased a portion of the PSY from the Port. Cascade then entered a lease with Portland Shipyard LLC (now SCC) to continue shipyard operations.

A number of measures have been implemented at the PSY over the years to eliminate or reduce emissions to the environment. These measures include both managerial and engineering controls. Some of these measures have been in place since the early 1970's and were initially introduced by the Port.

When Cascade became the sole operator of the PSY in December 1995, it adopted many of these measures as well as introduced new ones. See attached Table 1 for a summary of stormwater control measures implemented. In addition, external measures such as regulating the use of products containing polychlorinated biphenyls and eliminating the use of butyltins in marine coatings contributed to environmental improvements. Consequently, there has been over 30 years of continuous reduction in emissions from operations at the facility.

Significant measures implemented by Cascade at the PSY since 1995 include the installation of wastewater and stormwater collection systems on all floating dry docks, and the elimination of direct discharges to the Willamette River from the facility's ballast water and process water treatment plants. Collectively, these measures significantly reduced the discharge of contaminants from Cascade operations in the past decade.

As one example, the effectiveness of source control in dry dock operations can be seen in the substantial reduction in metals concentrations in the upper layer of sediments in dry dock areas. See attached Figures 4 and 5.

Based on available data from 1998 through 2005/2007 (RI Round 2 sampling), concentrations of metals in the dry dock basin substantially diminished in the past decade. Metals are typically found in sand blast grit, paint chips, and other materials from overwater dry dock activities.

Although the sampling locations and protocols are not identical, sampling results in similar locations taken from the upper interval (where recent discharges would be expected to be measured) indicate substantial reduction in metals loading. This comparison is not a comprehensive evaluation, but one indicator of effective source control and the effects of improved dry dock operations described above.

These results are consistent with reductions found in metals concentrations in other Superfund sites after source controls were implemented (see, e.g., Metals Concentrations in Commencement Bay Waterways During 1997-1998. Washington State Department of Ecology, 1999. Return to Clean: Washington State's source-control efforts cut metals concentrations in Commencement Bay by a factor of 10. IN Water Environment and Technology, June 1999, p. 51-57).

#### Conclusion

We appreciate the opportunity to provide detailed information on Cascade's facilities and operations, so that EPA is aware of the differences between: (1) the current Property boundaries and the historic Swan Island shipyard and industrial area; (2) historical and recent shipyard management and environmental controls; (3) the current shipyard and other industrial and municipal dischargers on and near the Property; and (4) the relationship of Cascade and the Port and coordination on our respective 104(e) responses regarding current and past operators on the Property.

We request that EPA consider these factors in reviewing the enclosed information. Please call me if you have any questions or are unable to locate any materials cited in our response.

Respectfully submitted,

Alan Sprott Vice President

Encs.

Cover Letter Attachments:

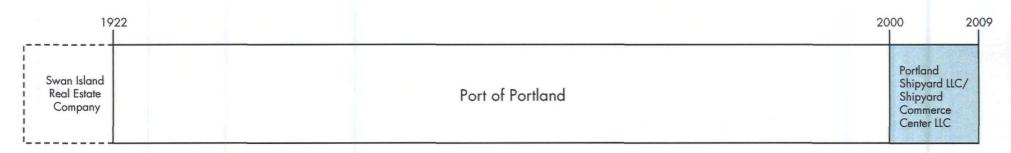
Figure 1: Owner/Operator Timeline
Figure 2: Map of Portland Shipyard
Figure 3: Map of the Property

Figure 4: Drydock 3 Metals Comparison Figure 5: Drydock 4 Metals Comparison

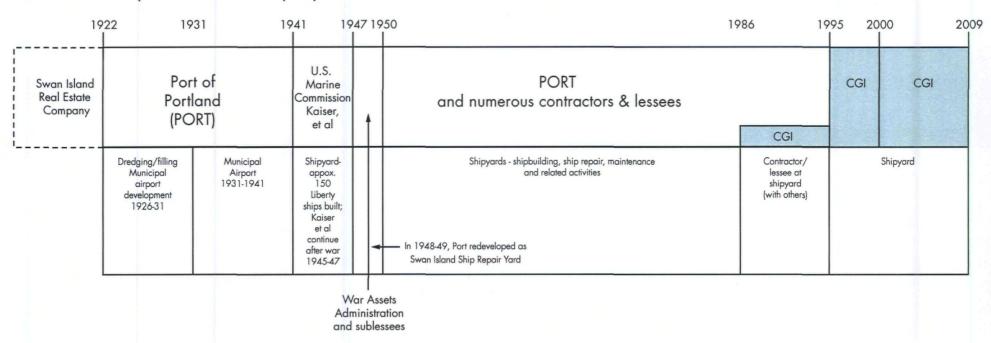
Table 1: Stormwater Controls

Figure 1: Owners & Users at the Property

# Owners of the Property:



# Users and Principal Uses of the Property:



Note: "Portland Shipyard" is a name that comprised different properties at different times in the history of Swan Island.

Cascade General owns and operates a portion of the properties that have historically been called the Portland Shipyard

Figure 2: Map of the Portland Shipyard



Figure 3: Map of the Property

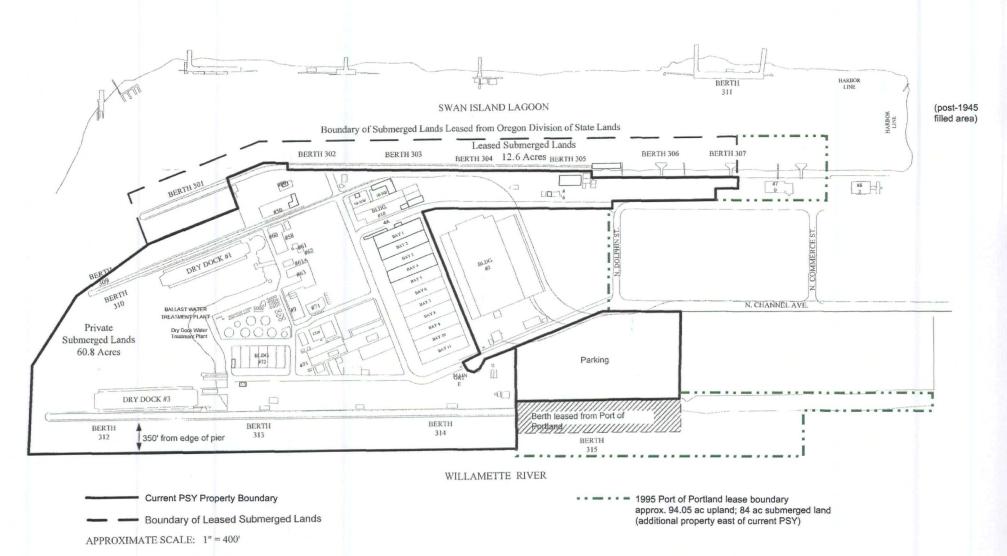


Figure 4: Drydock 3 Metals Comparison

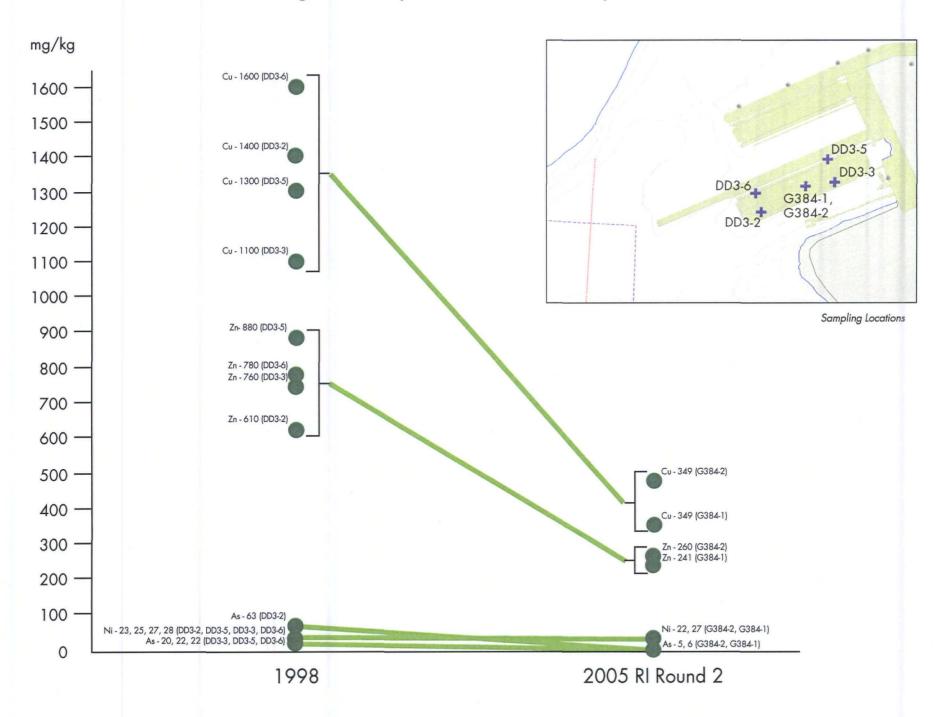


Figure 5: Drydock 4 Metals Comparison

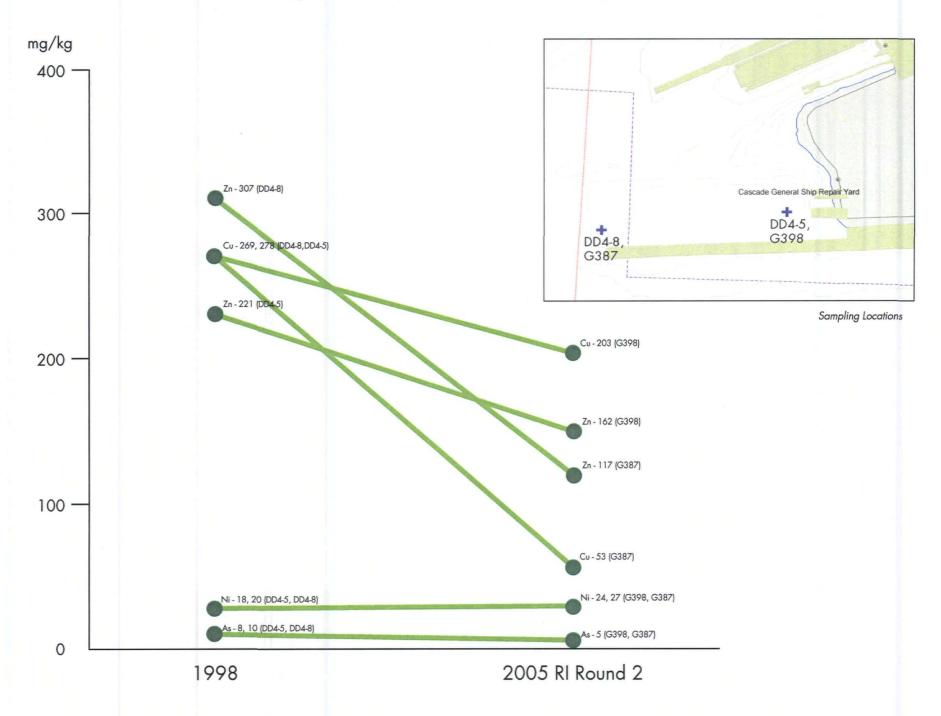


Table 1. Summary of Stormwater Controls

Measure	Location	Description
Housekeeping	Throughout facility	General trash and refuse is routinely picked up and removed by hand and mechanical sweeper. Debris is picked up from work areas at the conclusion of each project. Trash receptacles are placed at permanent locations around the facility, and placed at temporary locations during projects.
Mechanical sweeping	Throughout facility	Mechanical sweeping is conducted on a regular basis hitting all areas of the facility at a minimum of once every two weeks. More frequent sweeping is conducted on an as needed basis in heavy work areas.
Spill cleanup	Throughout facility	Small spills of oil and other chemicals to the ground are responded to immediately to prevent commingling with storm water.
Dry dock curtains	Dry docks 1 and 3	Curtains are hung at both ends of the dry docks during blasting and coating operations. The curtains span the width and height of the dock. The curtains spoil the airflow into the work area of the dock and reduce the drift of paint and blast grit particulates.
Shrouds and containment	Ships at berth and in dry docks	Temporary barriers ranging in complexity from plywood structures to shrink-wrapped staging are used to contain blasting and coating operations on selected areas of ships. These structures are typically erected on the superstructures of ships and are intended to provide containment of particulates.
Blast and coat booths	Paint shops and laydown areas	Semi-permanent and temporary booths are used for containment during blasting and coating of portable steel parts. The booths are outfitted with curtains to provide containment of particulates.
Waste management practices	Throughout facility	Operating practices and infrastructure is in place for the management of the various waste streams generated at the facility. Spent grit is stored in a covered bunker. Hazardous waste is stored under cover in a 90-day area or satellite accumulation areas.
Rolling equipment	Throughout facility	Rolling stock is regularly maintained through the facility's repair shop or vendors providing leased equipment. Equipment with fluid leaks suck as oil or coolant are pulled from service until repaired.

Work practices and engineering controls	Project locations	Production teams in conjunction with environmental personnel routinely review specific attributes of a project to identify ways to minimize impacts to air and water quality. Typically, solutions are developed based on approach, work practices, or engineering controls to reduce or eliminate emissions. These solutions range from changing the sequence of work to designing elaborate containment systems, and are often very project specific in nature.
Catch basin and storm line cleaning	Throughout facility	All catch basins at the facility are cleaned twice per year on average. Some catch basins in high use areas are cleaned more frequently. Storm drain lines are cleaned approximately every five years, with the last major cleaning performed in the fall of 2005.